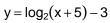
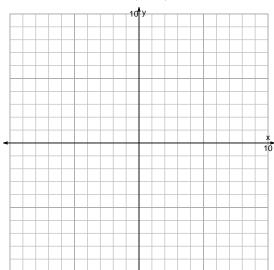
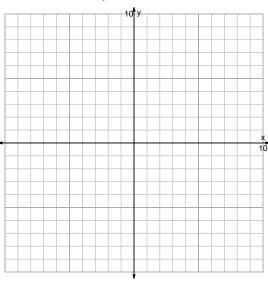
s18quiz: EXP LOG (QUIZ v224)

1. Graph  $y = \log_2(x+5) - 3$  and  $y = 2^{x+4} - 3$  on the grids below. Also, draw any asymptotes with dotted lines.





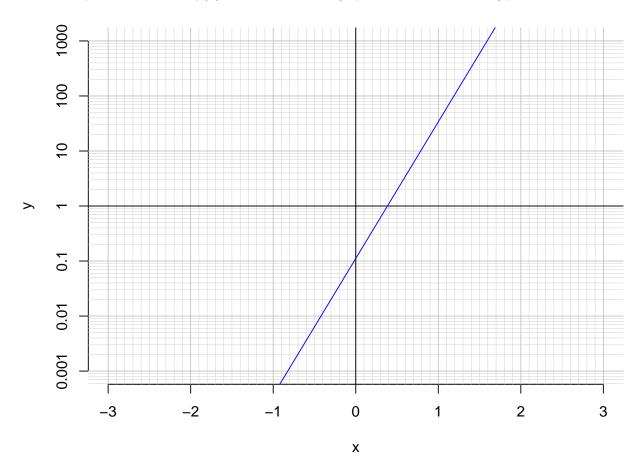
$$y = 2^{x+4} - 3$$



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-13 = \left(\frac{-3}{7}\right) \cdot 10^{-4t/5}$$

3. An exponential function  $f(x) = 0.111 \cdot e^{5.72x}$  is graphed below on a semi-log plot.



- a. Using the plot above, evaluate f(1.1).
- b. Express  $f^{-1}(x)$ , the inverse of f.
- c. Using the plot above, evaluate  $f^{-1}(0.02)$ .